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DATE: March 7, 2012

TO: Kelley Chase, EPA Region 3 OSC
Cynthia Caporale, EPA Region 3 OASQA

THROUGH: Ex. 4 - CBI SERAS Program Manager

FROM: Ex. 4 - CBI, SERAS QA/QC Officer

SUBJECT: VERIFICATION/COMPLETENESS CHECK – DIMOCK, PA LABORATORY DATA
File 1201015 FINAL PART 3 of 3 R33907 02 28 12 1443.pdf
File 1202001 FINAL PART 3 of 3 R33907 03 01 12 1408.pdf

INTRODUCTION

On March 7, 2012, a review of the case narratives and corresponding certificates of analysis from the EPA R3 (WO1202015 PART 3 Posted Feb 29 and WO1202011 PART 3 Posted Mar 01) was conducted at the SERAS facility in accordance with the Follow-Up Verification/Completeness Check agreed upon during our teleconference on Wednesday 2/8/12.

The assumptions for this review include the following: 1) Case narratives from the Regional labs and/or subcontract labs have been reviewed in accordance with Regional or Environmental Services Assessment Team (ESAT) protocols and contain all pertinent and complete information to conduct the completeness check. SERAS will base this review on the information provided by the laboratory and not on an actual data package; and 2) SERAS will relay any "red" flags to the EPA R3 personnel to resolve and determine data usability.

OBSERVATIONS

In accordance with Table 1 – Field and QC Sampling Summary (Rev01 - 2/3/12), Table 2 – Sample Analytical Requirements Summary (Rev01 – 2/3/12), Methods for Groundwater and Surface Water Samples and the R3 SOPs R3QA108-110811 (anions by IC), R3QA163-110811 (oil & grease), R3QA131-080311 (total mercury), Method 365.4 (total phosphorous), Method 353.2 using flow injection (nitrate/nitrite as nitrogen), R3QA105-110811 (total dissolved solids), Method 353.2 using flow injection (total nitrogen) and R3QA106-110311 (total suspended solids), the following observations were noted and need to be clarified/resolved.

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1. The case narrative for total phosphorous states that the matrix spike recovery results were outside of criteria for sample 1201015-18 (HW35-F). The sample spiked was actually 1201015-19 (HW20). This appears to be a typographical error and needs to be revised. The result qualifier in Scribe for HW20 should be "UJ".
2. The equipment blank (EB01) was used to qualify sample data. Since it cannot be determined what samples are associated with this equipment blank, the sample qualifiers should be based on the respective method and field blanks only. The following qualifiers are recommended for the TDS analysis based on the results of the method blank (for all samples) and FB06 (for samples HW18, HW13, HW18-P, HW25-P, HW20 and HW20-P): For samples EB01, FB06, HW13, HW18-P, HW25-P, HW35, HW20, HW20-P, HW32, HW32-P and HW52, a qualifier of "J+" indicating that the results are estimated high should be entered into the results qualifier column in Scribe. For samples HW18, HW26-P, HW26, HW33, HW33a-P and

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HW33b-P that were flagged with a "B" by the laboratory, no qualifiers should be entered into the result qualifier column in Scribe since these results were either non-detect, the concentrations were greater than 10X the blank concentrations and were associated with field blanks that were non-detect.

3. It is assumed that all required instrument QC in the method was run and was within the criteria listed in the EPA R3 SOPs since this information is not available in the laboratory report.
4. This reviewer agrees with the lab qualifier of "J" assigned to sample HW35 for the TDS RPD exceeding the criterion; however, this qualifier is overridden by the "J+" qualifier assigned to this sample in item #2 above. Since the NFG would typically assign qualifiers to the whole batch, professional judgment is being used to only qualify the sample that was analyzed in duplicate. This reviewer cannot ascertain if all samples in the batch are sufficiently similar to qualify the entire batch.
5. This reviewer agrees with the lab qualifier of "J" assigned to sample HW35 for the nitrate/nitrite matrix spike exceeding the criterion. Since the NFG typically assigns qualifiers to the whole batch, professional judgment is being used to only qualify the sample spiked. This reviewer cannot ascertain if all samples in the batch are sufficiently similar to qualify the entire batch. For sample HW35 for nitrate/nitrite, a "J" qualifier should be entered in the result qualifier column in Scribe.
6. The LCS for oil and grease for Batch BB21403 was recovered at 137% outside of the 78-114% criterion. No qualification of the data for the samples associated with this batch is necessary.

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1. This reviewer agrees with the lab qualifier of "J" assigned to sample HW09 for the nitrate/nitrite matrix spike exceeding the 85-115% criterion. Since the NFG typically assigns qualifiers to the whole batch, professional judgment is being used to only qualify the sample spiked. This reviewer cannot ascertain if all samples in the batch are sufficiently similar to qualify the entire batch. For sample HW09 for nitrate/nitrite, a "J" qualifier should be entered in the result qualifier column in Scribe.
2. This reviewer agrees with the lab qualifier of "J" assigned to sample HW42z for the total nitrogen RPD exceeding the 20% criterion. Since the NFG would typically assign qualifiers to the whole batch, professional judgment is being used to only qualify the sample that was analyzed in duplicate. This reviewer cannot ascertain if all samples in the batch are sufficiently similar to qualify the entire batch. For sample HW42z for total nitrogen, a "J" qualifier should be entered into the result column in Scribe.
3. This reviewer agrees with the lab qualifier of "UJ" assigned to samples HW42, HW46, HW46-P, FB09, FB08, HW34a, HW42z, HW34a-P, HW28a and HW28a-P for the oil and grease MRL exceeding the 60-140% criterion. Since this method is gravimetric, it is not possible to elevate the reporting limit to the next standard. For samples HW42, HW46, HW46-P, FB09, FB08, HW34a, HW42z, HW34a-P, HW28a and HW28a-P for oil and grease, a "UJ" qualifier should be entered in the result qualifier column in Scribe.

cc: Ex. 4 - CBI SERAS Project Officer
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